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SEQUENCE LISTING

- <110> PEETERS, PIETER JOHAN GOHLMANN, HINRICH WILHELM HELMUT SWAGEMAKERS, SIGRID MARIA ALICE FIERENS, FREDERIK LUCIEN PETER
- <120> GENES WHOSE EXPRESSION IS INCREASED IN RESPONSE TO STIMULATION BY CORTICOTROPIN-RELEASING HORMONE
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- <150> PCT/EP03/011793
- <151> 2003-10-23
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Ile Gln Asn Lys His Leu Cys His Arg Met Ser Ser Ala Leu Glu Ser 50 55 60

Val Thr Val Asn Asn Arg Pro Leu Glu Met Ser Val Thr Lys Ser Glu 65 70 75 80

Ala Ala Pro Glu Glu Asp Glu Arg Lys Arg Arg Arg Arg Glu Arg Asn 85 90 95

Lys Ile Ala Ala Lys Cys Arg Asn Lys Lys Glu Lys Thr Glu
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Cys Leu Gln Lys Glu Ser Glu Lys Leu Glu Ser Val Asn Ala Glu Leu 115 120 125

Lys Ala Gln Ile Glu Glu Leu Lys Asn Glu Lys Gln His Leu Ile Tyr 130 135 140

Met Leu Asn Leu His Arg Pro Thr Cys Ile Val Arg Ala Gln Asn Gly 145 150 155 160

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<212> PRT

<213> Mus musculus

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Glu Lys Asp Leu Ser Asp Leu Val Ser Glu Met Glu Met Met Lys Met

Ile Gly Lys His Lys Asn Ile Ile Asn Leu Leu Gly Ala Cys Thr Gln

Asp Gly Pro Leu Tyr Val Ile Val Glu Tyr Ala Ser Lys Gly Asn Leu

Arg Glu Tyr Leu Arg Ala Arg Arg Pro Pro Gly Met Glu Tyr Ser Tyr 105 110

Asp Ile Asn Arg Val Pro Glu Glu Gln Met Thr Phe Lys Asp Leu Val

Ser Cys Thr Tyr Gln Leu Ala Arg Gly Met Glu Tyr Leu Ala Ser Gln 135

Lys Cys Ile His Arg Asp Leu Ala Ala Arg Asn Val Leu Val Thr Glu 145 150 155

Asn Asn Val Met Lys Ile Ala Asp Phe Gly Leu Ala Arg Asp Ile Asn

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Trp Met Ala Pro Glu Ala Leu Phe Asp Arg Val Tyr Thr His Gln Ser 195 200 205

Asp Val Trp Ser Phe Gly Val Leu Met Trp Glu Ile Phe Thr Leu Gly

Gly Ser Pro Tyr Pro Gly Ile Pro Val Glu Glu Leu Phe Lys Leu Leu 225 230 235 240

Lys Glu Gly His Arg Met Asp Lys Pro Thr Asn Cys Thr Asn Glu Leu 245 250 250

Tyr Met Met Met Arg Asp Cys Trp His Ala Val Pro Ser Gln Arg Pro 260 265 270

Thr Phe Lys Gln Leu Val Glu Asp Leu Asp Arg Ile Leu Thr Leu Thr 275 280 285

Thr Asn Glu Glu Tyr Leu Asp Leu Thr Gln Pro Leu Glu Gln Tyr Ser 290 295 300

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Cys Lys His Ala Glu Val Gln Ser Ile Leu Lys Met Ser His Pro Gln
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Glu Pro Glu Leu Met Asn Ala Asn Pro Ser Pro Pro Pro Ser Pro Ser 65 70 75 80

Gln Gln Ile Asn Leu Gly Pro Ser Ser Asn Pro His Ala Lys Pro Ser 85 90 95

Asp Phe His Phe Leu Lys Val Ile Gly Lys Gly Ser Phe Gly Lys Val

Leu Leu Ala Arg His Lys Ala Glu Glu Val Phe Tyr Ala Val Lys Val 115 120 125

Leu Gln Lys Lys Ala Ile Leu Lys Lys Glu Glu Lys His Ile Met 130 135 140

Ser Glu Arg Asn Val Leu Leu Lys Asn Val Lys His Pro Phe Leu Val 145 150 155 160 Gly Leu His Phe Ser Phe Gln Thr Ala Asp Lys Leu Tyr Phe Val Leu 165 170 175

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Cys Phe Leu Glu Pro Arg Ala Arg Phe Tyr Ala Ala Glu Ile Ala Ser 195 200 205

Ala Leu Gly Tyr Leu His Ser Leu Asn Ile Val Tyr Arg Asp Leu Lys 210 215 220

Pro Glu Asn Ile Leu Leu Asp Ser Gln Gly His Ile Val Leu Thr Asp 225 230 235 240

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Pro Tyr Asp Arg Thr Val Asp Trp Trp Cys Leu Gly Ala Val Leu Tyr 275 280 285

Glu Met Leu Tyr Gly Leu Pro Pro Phe Tyr Ser Arg Asn Thr Ala Glu 290 295 300

Met Tyr Asp Asn Ile Leu Asn Lys Pro Leu Gln Leu Lys Pro Asn Ile 305 310 315 320

Thr Asn Ser Ala Arg His Leu Leu Glu Gly Leu Leu Gln Lys Asp Arg 325 . 330 . 335

Thr Lys Arg Leu Gly Ala Lys Asp Phe Met Glu Ile Lys Ser His 340 345 350

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- Pro Val Ala Val Lys His Val Val Lys Glu Arg Val Thr Glu Trp Gly 65 70 75 80
- Ser Leu Gly Gly Val Ala Val Pro Leu Glu Val Val Leu Leu Arg Lys 85 90 95
- Val Gly Ala Ala Gly Gly Ala Arg Gly Val Ile Arg Leu Leu Asp Trp
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- Phe Glu Arg Pro Asp Gly Phe Leu Leu Val Leu Glu Arg Pro Glu Pro 115 120 125
- Ala Gln Asp Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu Asp Glu 130 135 140
- Pro Leu Ala Arg Arg Phe Phe Ala Gln Val Leu Ala Ala Val Arg His 145 150 155 160
- Cys His Asn Cys Gly Val Val His Arg Asp Ile Lys Asp Glu Asn Leu 165 170 175
- Leu Val Asp Leu Arg Ser Gly Glu Leu Lys Leu Ile Asp Phe Gly Ser 180 185 190
- Gly Ala Val Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr Arg 195 200 205
- Val Tyr Ser Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly Arg 210 215 220
- Ser Ala Thr Val Trp Ser Leu Gly Val Leu Leu Tyr Asp Met Val Cys 225 230 235 240
- Gly Asp Ile Pro Phe Glu Gln Asp Glu Glu Ile Leu Arg Gly Arg Leu 245 250 255
- Phe Phe Arg Arg Val Ser Pro Glu Cys Gln Gln Leu Ile Glu Trp 260 265 270
- Cys Leu Ser Leu Arg Pro Ser Glu Arg Pro Ser Leu Asp Gln Ile Ala 275 280 285
- Ala His Pro Trp Met Leu Gly Thr Glu Gly Ser Val Pro Glu Asn Cys 290 295 300
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- Gly Gly Val Asn Ser Ser Ser His Thr Gly Thr Leu Arg Thr Arg Gly 65 70 75 80
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- Glu Ser Gln Thr Thr Lys Gly Ala Tyr Ser Leu Ser Ile Arg Asp Trp 180 185 190
- Asp Asp Met Lys Gly Asp His Val Lys His Tyr Lys Ile Arg Lys Leu 195 200 205
- Asp Asn Gly Gly Tyr Tyr Ile Thr Thr Arg Ala Gln Phe Glu Thr Leu 210 215 220
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- Gly Asn Thr Lys Val Ala Ile Lys Thr Leu Lys Pro Gly Thr Met Ser 290 295 300
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- Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Leu Ile Glu Asp Asn Glu
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- Tyr Thr Ala Arg Gln Gly Ala Lys Phe Pro Ile Lys Trp Thr Ala Pro 420 425 430
- Glu Ala Ala Leu Tyr Gly Arg Phe Thr Ile Lys Ser Asp Val Trp Ser 435 440 445
- Phe Gly Ile Leu Leu Thr Glu Leu Val Thr Lys Gly Arg Val Pro Tyr 450 460
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- Arg Met Pro Cys Pro Gln Asp Cys Pro Ile Ser Leu His Glu Leu Met 485 490 495
- Ile His Cys Trp Lys Lys Asp Pro Glu Glu Arg Pro Thr Phe Glu Tyr
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- Glu Leu His Arg Leu Leu His His Lys His Val Val Gln Phe Tyr His 130 135 140
- Tyr Phe Glu Asp Lys Glu Asn Ile Tyr Ile Leu Leu Glu Tyr Cys Ser 145 150 155 160
- Arg Arg Ser Met Ala His Ile Leu Lys Ala Arg Lys Val Leu Thr Glu 165 170 175
- Pro Glu Val Arg Tyr Tyr Leu Arg Gln Ile Val Ser Gly Leu Lys Tyr 180 185 190
- Leu His Glu Gln Glu Ile Leu His Arg Asp Leu Lys Leu Gly Asn Phe 195 200 205
- Ile Ile Asn Glu Ala Met Glu Leu Lys Val Gly Asp Phe Gly Leu Ala 210 215 220
- Ala Arg Leu Glu Pro Leu Glu His Arg Arg Arg Thr Ile Cys Gly Thr 225 230 235
- Pro Asn Tyr Leu Ser Pro Glu Val Leu Asn Lys Gln Gly His Gly Cys 245 250 255
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- Ile Arg Glu Ala Arg Tyr Thr Met Pro Ser Ser Leu Leu Ala Pro Ala 290 295 300
- Lys His Leu Ile Ala Ser Met Leu Ser Lys Asn Pro Glu Asp Arg Pro 305 310 315 320
- Ser Leu Asp Asp Ile Ile Arg His Asp Phe Phe Leu Gln Gly Phe Thr 325 330 335
- Pro Asp Arg Leu Ser Ser Cys Cys His Thr Val Pro Asp Phe His 340 345 350
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- Phe Gly Gly Lys Lys Asp Lys Ala Arg Tyr Asn Asp Thr His Asn Lys 370 375 380

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- Phe Gly Tyr Gln Leu Ser Asp His Thr Val Gly Val Leu Phe Asn Asn 515 520 525
- Gly Ala His Met Ser Leu Leu Pro Asp Lys Lys Thr Val His Tyr Tyr 530 535 540
- Ala Glu Leu Gly Gln Cys Ser Val Phe Pro Ala Thr Asp Ala Pro Glu 545 550 555 560
- Gln Phe Ile Ser Gln Val Thr Val Leu Lys Tyr Phe Ser His Tyr Met 565 570 575
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- Arg Arg Pro Arg Leu Tyr Leu Leu Gln Trp Leu Lys Ser Asp Lys Ala
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- Asp His Thr Lys Ile Ile Ile Cys Asn Gln Ser Glu Glu Tyr Leu Leu 625 630 635 640
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Gln Thr Leu Asp Pro Phe Leu Asp Glu Gln Asn Thr Thr Gly Pro Leu
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Gln Ala Ser Asn Gln Ser Glu Ala His Ile Arg Val Lys Arg Tyr Arg

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90

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Ser Ser Pro Arg Asn Ser Pro Cys Phe Phe Arg Lys Leu Leu Val Asn 50 55 60

Lys Ser Ile Arg Gln Arg Arg Phe Thr Val Ala His Thr Cys Phe 65 70 75 80

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- Asp His Leu Ala Lys Glu Leu Glu Asp Leu Asn Lys Trp Gly Leu Asn 325 330 335
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- Glu Leu Ala Leu Met Tyr Asn Asp Glu Ser Val Leu Glu Asn His His 450 455 460
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Ser Thr Lys Thr Leu Cys Val Ile Asp Pro Glu Asn Arg Asp Ser Leu 690 700

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Asn Ile Gln Glu Ala Thr Ser Gly Cys Phe Thr Thr Ala Gln Lys Arg 165 170 175

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His Ser Pro Gln Gln Leu Ala Glu Glu Ala Thr Arg Lys Arg Glu Leu 165 170 175

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- Asp Leu Ile Met Asn Ala Ser Ser Asp Arg Val Phe His Glu Ser Ile 1810 1815 1820
- Leu Leu Ala Ile Ala Leu Leu Glu Gly Gly Asn Thr Thr Ile Gln His 1825 1830 1835 1840
- Ser Phe Phe Cys Arg Leu Thr Glu Asp Lys Lys Ser Glu Lys Phe Phe 1845 1850 1855
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- Lys Glu Arg Leu Ala Ala Leu Gly Pro Glu Gly Ala His Gly Asp Thr 610 620
- Thr Phe Glu Tyr Gln Asp Leu Cys Arg Gln His Met Ala Thr Lys Ser 625 630 635 640
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- Ala Glu Pro Asn Thr Cys Ala Ala Ala Gln Asp Glu Ser Asn Ile Lys
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- Lys Asn Arg His Pro Asp Phe Leu Pro Tyr Asp His Ala Arg Ile Lys
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- Leu Lys Val Glu Ser Ser Pro Ser Arg Ser Asp Tyr Ile Asn Ala Ser
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- Ser Gly Cys Thr Val Ile Val Met Leu Thr Pro Leu Val Glu Asp Gly 805 810 815
- Val Lys Gln Cys Asp Arg Tyr Trp Pro Asp Glu Gly Ser Ser Leu Tyr 820 825 830
- His Val Tyr Glu Val Asn Leu Val Ser Glu His Ile Trp Cys Glu Asp 835 840 845
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- Ala Ser Thr Arg Pro Leu Leu Asp Phe Arg Arg Lys Val Asn Lys Cys 885 890 895
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- Gly Arg Thr Gly Thr Tyr Ile Leu Ile Asp Met Val Leu Asn Arg Met 915 920 925
- Ala Lys Gly Val Lys Glu Ile Asp Ile Ala Ala Thr Leu Glu His Val 930 935 940
- Arg Asp Gln Arg Pro Gly Leu Val Arg Ser Lys Asp Gln Phe Glu Phe 945 950 955 960

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His Asn Val Lys Glu Leu Phe Glu Gly Ile Glu Arg Gln Val Arg Leu 225 230 235 240

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70

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- Leu Leu Asp Gly Leu His Asn Glu Val Asn Arg Val Ala Ala Arg Pro 115 120 125
- Lys Ala Ser Pro Glu Thr Leu Asp His Leu Pro Asp Glu Glu Lys Gly 130 135 140
- Arg Gln Met Trp Arg Lys Tyr Leu Glu Arg Glu Asp Ser Arg Ile Gly
 145 150 155 160
- Asp Leu Phe Val Gly Gln Leu Lys Ser Ser Leu Thr Cys Thr Asp Cys
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- Gly Tyr Cys Ser Thr Val Phe Asp Pro Phe Trp Asp Leu Ser Leu Pro 180 185 190
- Ile Ala Lys Arg Gly Tyr Pro Glu Val Thr Leu Met Asp Cys Met Arg 195 200 205
- Leu Phe Thr Lys Glu Asp Ile Leu Asp Gly Asp Glu Lys Pro Thr Cys 210 215 220
- Cys Arg Cys Arg Ala Arg Lys Arg Cys Ile Lys Lys Phe Ser Val Gln 225 230 235 240
- Arg Phe Pro Lys Ile Leu Val Leu His Leu Lys Arg Phe Ser Glu Ser 245 250 255
- Arg Ile Arg Thr Ser Lys Leu Thr Thr Phe Val Asn Phe Pro Leu Arg 260 265 270
- Asp Leu Asp Leu Arg Glu Phe Ala Ser Glu Asn Thr Asn His Ala Val 275 280 285
- Tyr Asn Leu Tyr Ala Val Ser Asn His Ser Gly Thr Thr Met Gly Gly 290 295 300
- His Tyr Thr Ala Tyr Cys Arg Ser Pro Val Thr Gly Glu Trp His Thr 305 310 315 320
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- Ile Thr Met Ala Tyr Asn Leu Asn Ser Pro Ala Gln Glu His Leu Thr 50 55 60
- Thr Val Gly Cys Ala Ala Arg Ser Ala Pro Gly Ser Gly His Phe Phe 65 70 75 80
- Ala Glu Cys Gly Pro Ser Pro Arg Ser Ser Leu Pro Pro Leu Val Ile 85 90 95
- Ser Pro Ser Glu Ser Ser Gly Gln Arg Glu Glu Asp Gln Val Met Cys
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- Gly Phe Lys Lys Leu Ser Val Asn Gly Val Cys Thr Ser Thr Pro Pro 115 120 125
- Leu Thr Pro Ile Lys Ser Cys Pro Ser Pro Phe Pro Cys Ala Ala Leu 130 135 140
- Cys Asp Arg Gly Ser Arg Pro Leu Pro Pro Leu Pro Ile Ser Glu Asp 145 150 155 160
- Leu Cys Val Asp Glu Ala Asp Ser Glu Val Glu Leu Leu Thr Thr Ser 165 170 175
- Ser Asp Thr Asp Leu Leu Glu Asp Ser Ala Pro Ser Asp Phe Lys 180 185 190
- Tyr Asp Ala Pro Gly Arg Arg Ser Phe Arg Gly Cys Gly Gln Ile Asn 195 200 205
- Tyr Ala Tyr Phe Asp Ser Pro Thr Val Ser Val Ala Asp Leu Ser Cys 210 215 220
- Ala Ser Asp Gln Asn Arg Val Val Pro Asp Pro Asn Pro Pro Pro 225 230 235 240
- Gln Ser His Arg Arg Leu Arg Arg Ser His Ser Gly Pro Ala Gly Ser
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- Phe Asn Lys Pro Ala Ile Arg Ile Ser Ser Cys Thr His Arg Ala Ser 260 265 270

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His Lys Ala Leu Ile Asp Arg Ser Val Gln Ala Ser Leu Glu Ser Gln

Lys Lys Leu Asn Trp Cys Arg Glu Val Arg Lys Leu Val Ala Leu Lys

Thr Asn Gly Asp Gly Asn Cys Leu Met His Ala Ala Cys Gln Tyr Met

Trp Gly Val Gln Asp Thr Asp Leu Val Leu Arg Lys Ala Leu Cys Ser

Thr Leu Lys Glu Thr Asp Thr Arg Asn Phe Lys Phe Arg Trp Gln Leu

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440

445

435

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- Thr Ala Glu Pro Ser Ser Ser Leu Thr Ser Ser Ile Pro Ala Ser Cys 530 535 540
- His Gln Arg Ser Lys Ser Asp Pro Ser Gln Leu Ile Gln Ser Leu Thr 545 550 560
- Pro His Ser Cys His Arg Thr Gly Asn Val Ser Pro Ser Gly Cys Leu
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- Pro Cys Leu Gly Arg Glu Cys Gly Thr Leu Gly Ser Thr Met Phe Glu 645 650 655
- Gly Tyr Cys Gln Lys Cys Phe Ile Glu Ala Gln Asn Gln Arg Phe His 660 665 670
- Glu Ala Arg Arg Thr Glu Glu Gln Leu Arg Ser Ser Gln His Arg Asp 675 680 685
- Met Pro Arg Thr Thr Gln Val Ala Ser Arg Leu Lys Cys Ala Arg Ala 690 695 700
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- Cys Gln His Leu Ser Gln Arg Val Gly Ser Val Ala His Arg Gly Glu
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- Pro Thr Pro Glu Glu Pro Pro Lys Gln Arg Cys Arg Ala Pro Ala Cys 740 745 750

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cccgci	ttgg ccacacccta cctgg		•	25
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